Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Amendment of 47 CFR Part 54 to establish the Rural Digital Opportunity Fund, Connect America Fund	)	WC Docket Nos. 19-126, 10-90; FCC 19-77

September 20, 2019

Reply Comments of
NORTH CAROLINA DEPARTMENT OF INFORMATION TECHNOLOGY
BROADBAND INFRASTRUCTURE OFFICE

Introduction

These comments make three recommendations from a state's perspective that we believe will enhance the Commission's proposal: incentivize investment in future-proof infrastructure, improve data to identify unserved areas, and coordinate with other federal and state funding programs.

We support the Commission's adoption of the reverse auction, descending clock format proposed. This mechanism has proven to be an efficient, impactful way to direct funds to areas where market forces are not working. The following comments are made with the intention of enhancing the effectiveness, reach and longevity of all funding programs working to close the digital divide.

Successful funding of broadband deployment in areas where market forces are not working depends on a data-driven approach. Before budgeting and committing to a process for distributing the funds, we encourage the FCC to take the time to accurately identify unserved areas.

Getting the money out the door is important, and time-honored practice in Washington, DC. But waiting, even 12 months, to fine-tune the current mapping and data collection initiatives, including the FCC's, would go a long way to ensuring money is making its biggest impact and helping the most people. Measure twice, cut once. It is only fair to the millions of people who pay extra on their phone bills to contribute to the Universal Service Fund programs to spend that money wisely.

We encourage greater coordination with USDA and the thirty-one states with programs to fund broadband expansion. Many states, frustrated with past federal grant funding mechanism, have created

their own grant and funding programs.[1] These efforts are born from the recognition by those on the ground that many areas continue to be overlooked or ignored.

The Commission's proposal to weigh applicants based on speed, latency and data capping criteria encourages investment in newer technologies. We suggest a more effective way may be to weigh scalability and symmetry. Technologies that can increase bandwidth needs with little to no cost and technologies that provide symmetrical upload and download speeds assure the applicant will deploy future-proof technology.

Measure Twice, Cut Once: **Collect better data first, then distribute the money**

We applaud and encourage the FCC's Digital Opportunity Data Collection proposal to improve data collection to more accurately identify unserved areas (WC Docket Nos. 11-10 and 19-195, FCC No. 19-79). This will dramatically improve the ability for all stakeholders and interested parties to plan and fund broadband deployment.

Similar concurrent initiatives by the National Telecommunications and Information Administration, US Telecom, Microsoft and several states, including North Carolina, will complement the Commission's effort. These initiatives could yield more accurate data in 24 months.

Inaccurate data leads to inefficient spending. It also results in many areas lacking broadband from being excluded from funding opportunities. We learned this while administering the state's Growing Rural Economies with Access to Technologies (GREAT) rural broadband grant program.

GREAT provided for a protest, or challenge, process where ISPs could provide detailed information about locations they serve if an applicant proposed to serve the same locations. Placing the burden of proof on the ISPs resulted in detailed location information within census blocks. Using satellite imagery and other data sources we were able to identify specific locations with and without service that were mislabeled. Given our limited resources it was just as important to avoid funding served locations as it was to fund unserved locations.

The recent US Telecom Broadband Mapping Initiative pilot program findings showed that 38 percent of rural locations in census blocks reported as served using current Form 477 data. It also found incorrect location counts in nearly 50 percent of rural census blocks. The pilot program was only conducted in two states and with the voluntary participation of less than all ISPs in those states. This should raise alarm bells, red flags and other euphemisms.

Legislation introduced in both the United States House of Representatives and Senate requires more granular reporting and precise location identification. Taking the time to allow the legislative process to play out this Congress could result in the authority and the resources the Commission needs to collect the data needed to assure that $20 billion is spend efficiently and effectively.

We recommend the agency implement RDOF in January 2022.

[1] According to the National Telecommunications and Information Administration thirty-one states have programs that fund broadband initiatives.

Can we all just get along? **Coordinating with USDA and state grant programs**

During this time the FCC could engage states with grant programs about how best to coordinate funding unserved areas. We are not recommending one idea or proposal. At a minimum, sharing information on which areas have received state funds, remaining unserved areas and proposed eligible areas would more efficiently use limited resources.

For example, the USDA ReConnect application process required states with grant programs to certify that ReConnect applicants were not double-dipping—using both state and ReConnect grants to support the same locations. This was a simple process, but one we embraced knowing the potential for funding areas not receiving state funds increased.

We believe that block grants to the states is the most effective way to distribute these funds. We appreciate that dividing the $20 billion between the states in the form of block grant funding is a moonshot request. At the very least the FCC should consider involving the states by accepting data identifying unserved areas outside of those acknowledged by the FCC, and by attempting to coordinate funding efforts with state grant programs and the USDA ReConnect grant program.

We also used the USAC CAF II location data and mapping to exclude specific locations from GREAT grant funding. This ensured we did not provide funding where it has already gone. At the same time we requested from CAF II recipients their future build locations. This information helped us to make the most of our resources. We encourage the FCC to avoid funding areas slated for state grant funding that may show as currently unserved pursuant to the proposal.

We encourage the Commission to direct career staff to convene a meeting with the relevant federal and state representatives to determine how to better coordinate funding.

Investing in future-proof infrastructure: **Proposed Performance Tiers, Latency, and Weights**

Paragraphs 16-20 of the Proposed Rule offer a mechanism to "reflect its preference for higher speeds, higher usage allowances, and low latency." The weighting mechanism proposed is a step in the right direction. However, setting speed thresholds alone may not provide enough incentive to deploy future-proof infrastructure. Internet service providers tend to err on the optimistic side when touting their technologies. In our grant program we have seen awardees walk back speed estimates and reduce projects post-award after acknowledging their network cannot meet the speed thresholds claimed in the application.

We are finding there is a value consideration a customer makes when purchasing internet services. People are unwilling to pay for poor service. Knowing that cost is the major barrier to the adoption of broadband services, this may explain low subscription rates in areas where ISPs boast speeds up to 10/1 Mbps and even 25/3 Mbps. Many internet service providers will tell us "we have built it, but they aren't subscribing."

One way to address this is to weigh scalability. In Minnesota the state grant program rewards those applicants that can scale from base-line speed requirements. This ensures the initial investment will facilitate greater bandwidth needs in the future. We recommend incentivizing scalability. Within the proposed framework this may require increasing the point spread between the best and least

performing tiers: Baseline = 90/Above Baseline = 50/Gigabit = 0. In other words, create a disincentive to simply building to 25/3 Mbps.

Most North Carolinians have some form of internet connection. But hundreds of thousands of households do not have an affordable, reliable, future-proof connections and have no chance of getting that level of service any time soon.

All funding programs should incentivize the improvement of the infrastructure. Instead of propping up legacy networks widely recognized as unable to handle large amounts bandwidth, programs should make investments for future use and needs.

Conclusion

We encourage the Commission to move forward with the implementation of RDOF in a way that will incentivize investment in future-proof infrastructure, improve data to identify unserved areas, and coordinate with other federal and state funding programs.

To ensure these objectives are met we suggest the Commission conduct the proposed reverse auction after it establishes and implements its proposed Digital Opportunity Data Collection and Modernizing the FCC Form 477 Data Program. This will allow time for the Commission to target funding more accurately.

During this time the Commission could also work to coordinate with the USDA and states to determine which unserved areas will be helped through those programs. This will help to avoid overlapping funding to the same areas. Considering the cost of solving the nation's broadband access problem, we should work to leverage limited resources in the most efficient way possible.

We appreciate the Commission's review of these comments and we applaud the Commission's work to close the digital divide.

NCDIT Broadband Infrastructure Office

The Broadband Infrastructure Office is a division of the North Carolina Department of Information Technology. The office administers the GREAT Grant and provides policy and technical guidance to local and state leaders seeking to expand and enhance affordable, high-speed internet access in their communities. The office understands that broadband can enhance a community's viability and livelihood by creating income opportunities, facilitating greater civic and cultural participation, expanding educational opportunities, and providing access to health care providers and other essential services.